

6

History-Social
Science Standards
6.5.1. and 6.6.1.



The Rivers and Ancient Empires of China and India

California Education and the Environment Initiative

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California Environmental Protection Agency
California Natural Resources Agency
Office of the Secretary of Education
California State Board of Education
California Department of Education
California Integrated Waste Management Board

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Key Partners:

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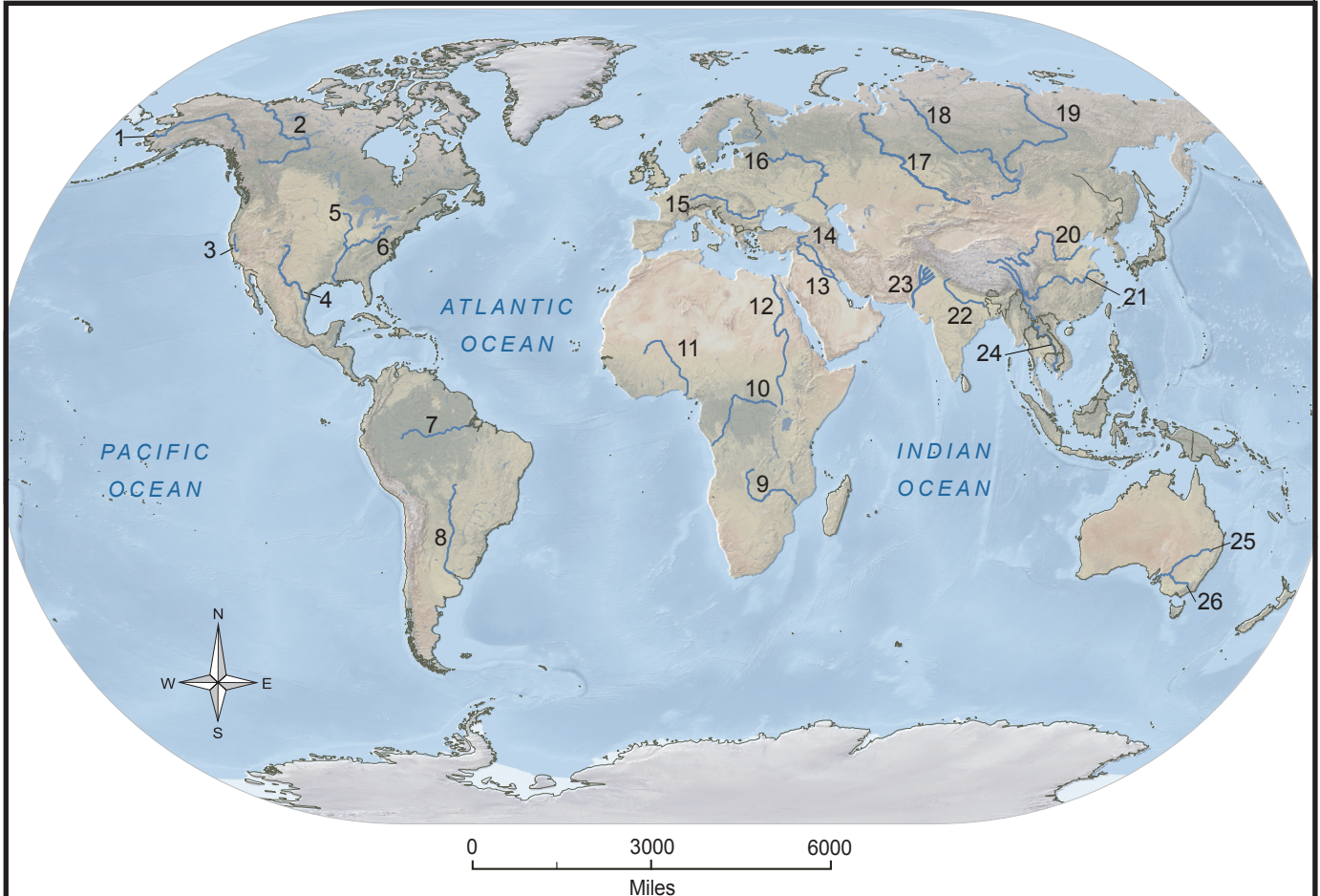
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Science Background Introducing a River System

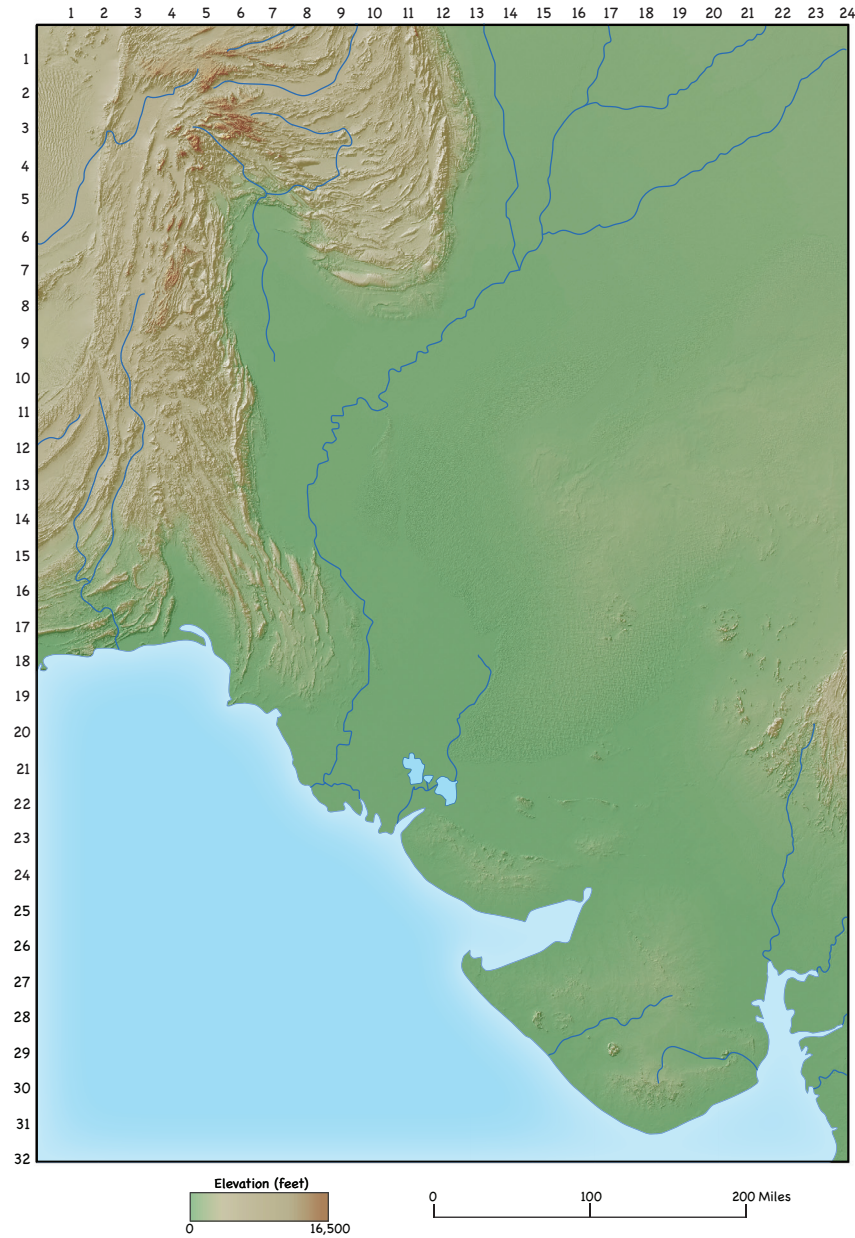
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VA #1 River Systems of the World

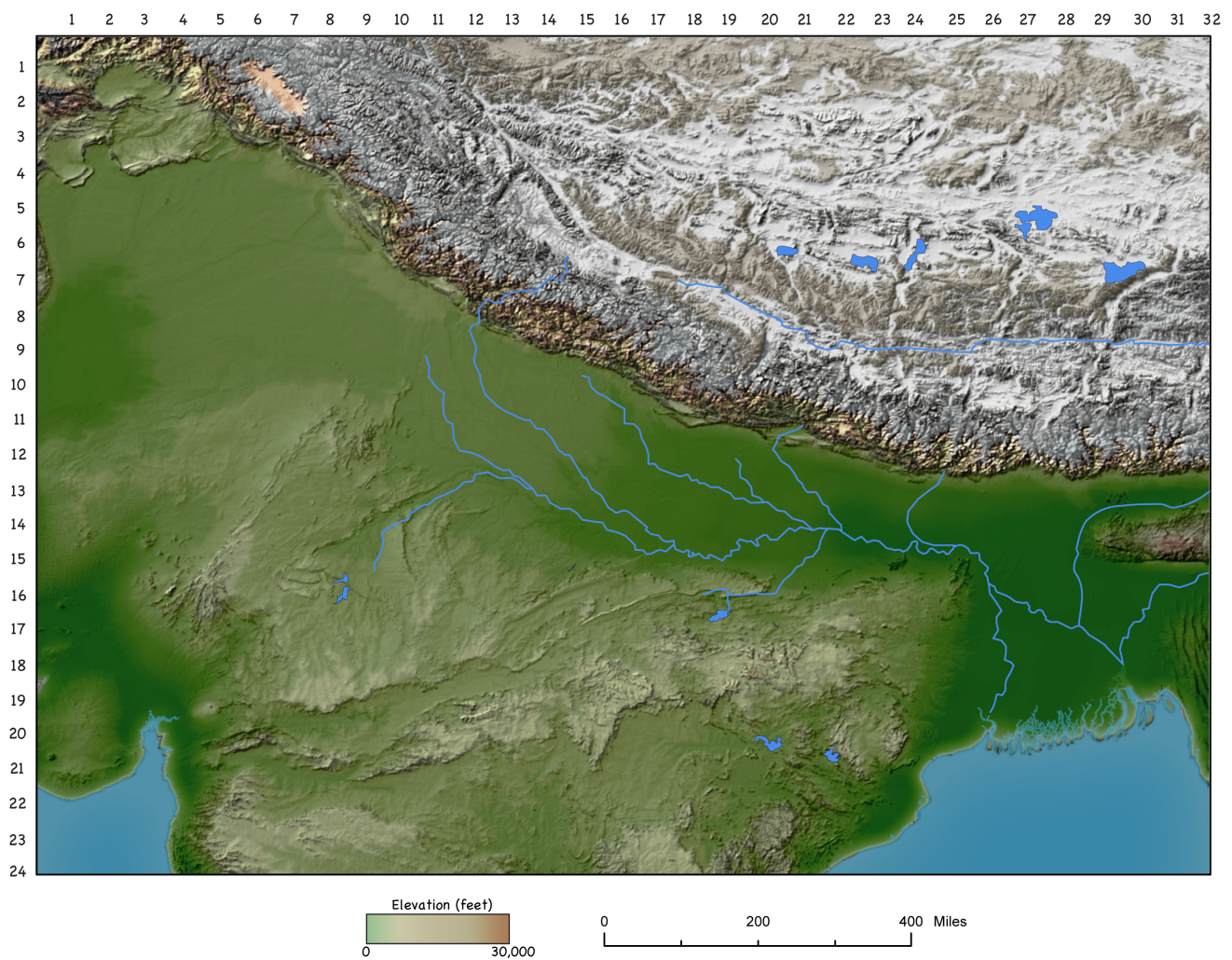


- | | | | |
|----------------------------------|---------------------|--------------------|-------------------|
| 1. Yukon River | 8. Parana River | 15. Danube River | 22. Ganges River |
| 2. Mackenzie River | 9. Zambezi River | 16. Volga River | 23. Indus River |
| 3. Sacramento/San Joaquin Rivers | 10. Congo River | 17. Ob River | 24. Mekong River |
| 4. Rio Grande River | 11. Niger River | 18. Yenisei River | 25. Darling River |
| 5. Mississippi River | 12. Nile River | 19. Lena River | 26. Murray River |
| 6. Ohio River | 13. Euphrates River | 20. Huang He River | |
| 7. Amazon River | 14. Tigris River | 21. Yangzi River | |

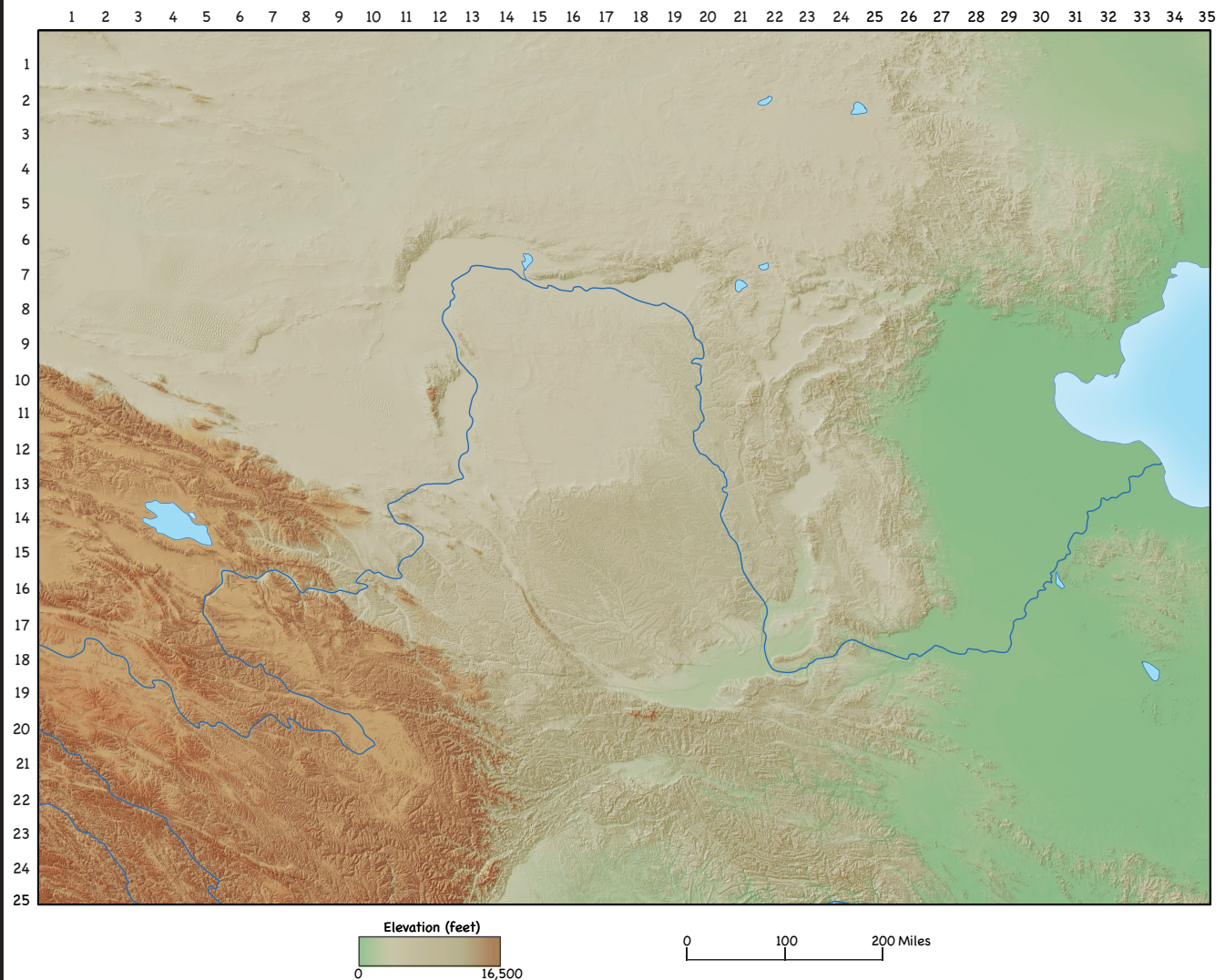
VA #2 Indus River Valley



VA #3 Ganges River Valley



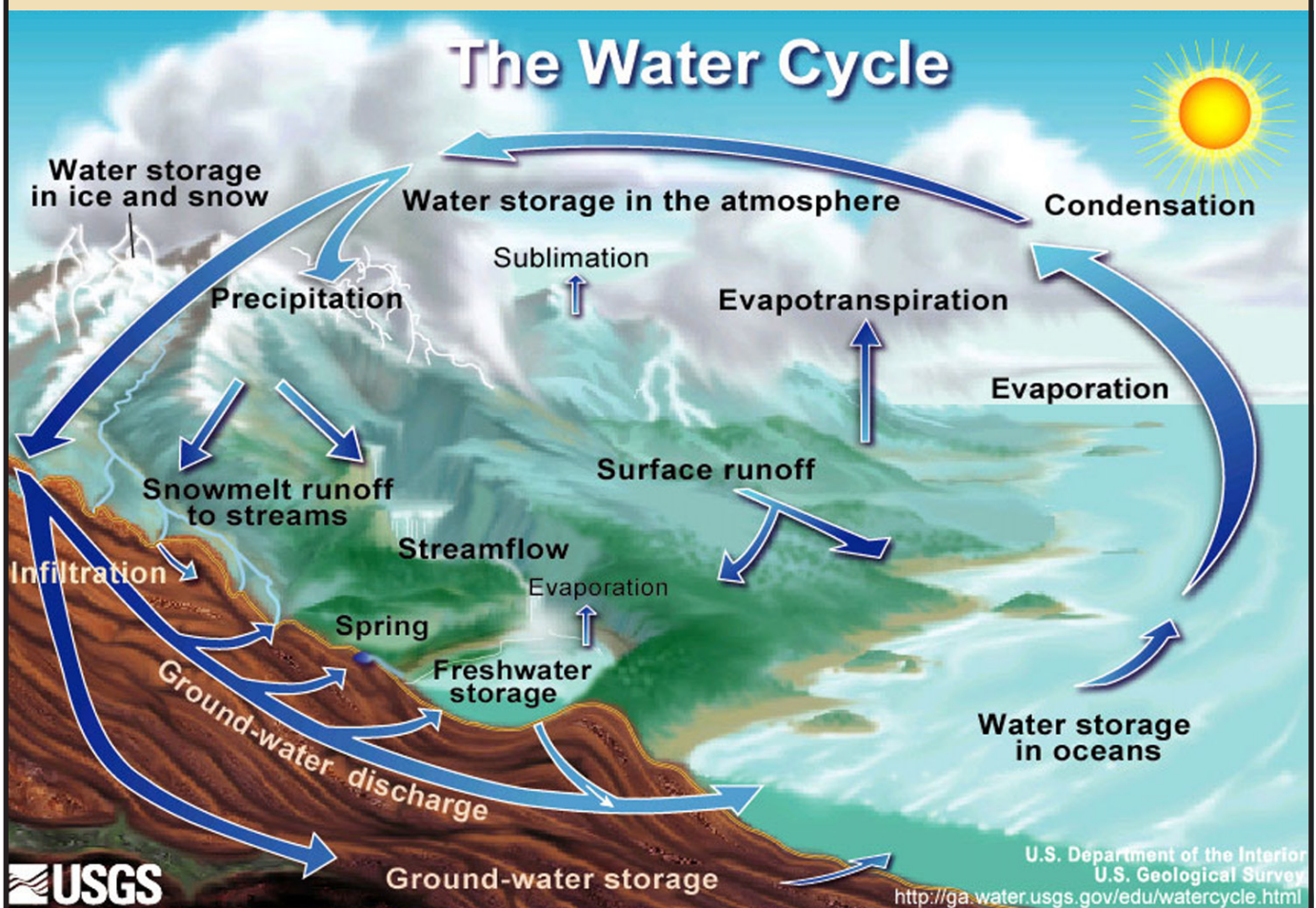
VA #4 Huang He River Valley



VA #5 Physical Map of Asia



VA #6 The Water Cycle



VA #7 Monsoon Song

Monsoon Song

by Guru Dev Rabindranath Tagore

After the long hot burning tropical summer,
When the dark clouds of rain make the first
appearance on the far side of the horizon,
One's heart is at once filled with joy and hope.
And then comes the rains, soaking the earth
and the human soul.

My mind flies with the clouds in
infinite space
To the musical accompaniment of
Shravana rains.
It takes wings and flies with the
wild ducks
And loses itself in the ecstasy of
turbulent nature.

A *barahmasa* is an Indian folk song about the seasons. There are thousands of barahmasas from all parts of India. One of the most famous is the **Monsoon Song**.

Mon Mor Megher Sangi

mon more meghero sangee,
ude chale dig digantero pane
nishimo shunne shrabano barshano sangeete
rimijhim rimijhim rimijhim.

mon more hansha balakar pakhay jaye ude
kachito kachito chakito tarito – aaloke.
jhanjhano manjeero bajay jhanjha rudra
anande.

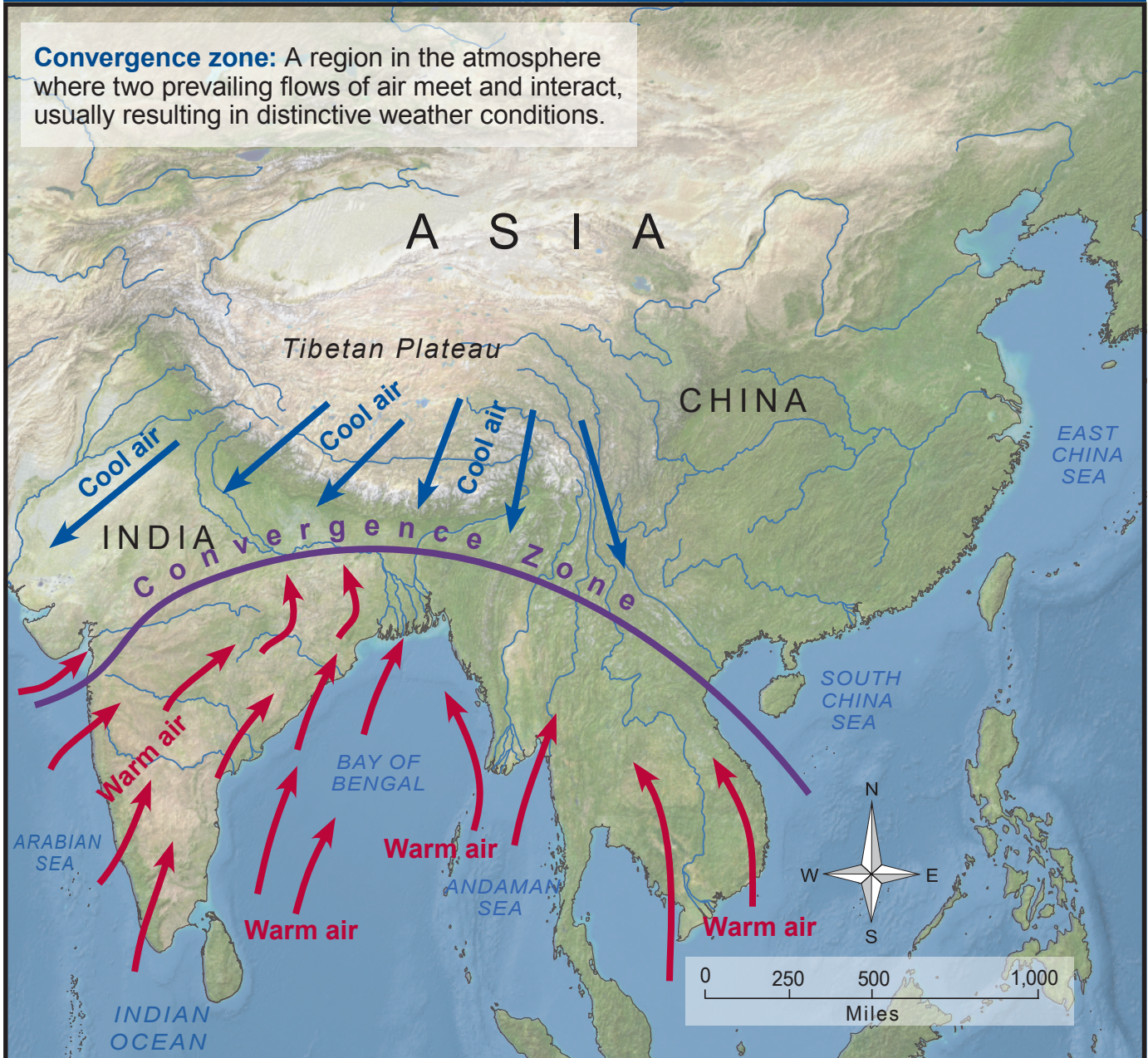
kolo – kolo kolo mondire
nirjharinee dak dyay pralaya aobhane.
bayu bahe purba samudra hote
uchchhala chhalo chhalo tatinee tarange.

mon more dhaye tari matto prabahe
tal – tamalo – aranney
khubdha shakhar andolaney.



VA #8 Asian Monsoon Wind Flow

Convergence zone: A region in the atmosphere where two prevailing flows of air meet and interact, usually resulting in distinctive weather conditions.



VA #9 Looking at Natural Resources and Rivers

The following presentation identifies the importance of water and major river systems to human life and ancient civilizations in India and China, and provides examples of the natural resources upon which early civilizations in these areas relied.



VA #10 Natural Resources and Rivers

The Indus, Ganges, and Huang He



VA #11 The Indus River Valley—Suited for Civilization

VA #12 Early Indus River Valley Civilization



Major Cities:

Harappa and Mohenjo Daro

The excavated city of Mohenjo Daro is located in modern day Pakistan.



VA #13 Early Settlements Along the Ganges



VA #14 The Indus and Ganges River Valleys

Ecosystem Goods:

- Indus and Ganges rivers: fresh water and fish
- Himalaya Mountains: forests of cedar trees
- Floodplains: fertile, alluvial soil, good for growing crops, such as wheat, barley, millet, peas, sesame seeds, dates, and cotton
- Rivers: soil, mud for bricks for building houses and walls



Millet



*Himalaya
Mountains*

VA #15 Natural Resources: Indus and Ganges River Valleys

- Thar Desert: gemstones (lapis lazuli, turquoise)
- Animals: water buffalo



Turquoise

Water buffalo

VA #16 Ecosystem Services

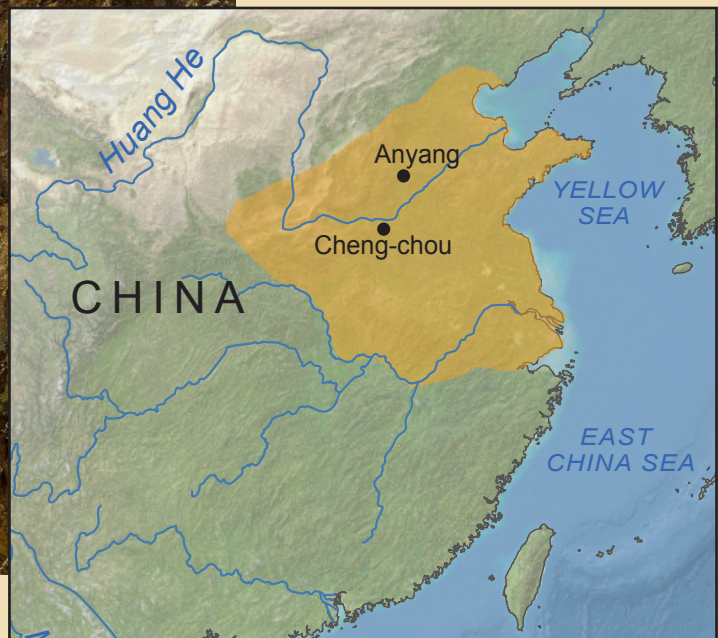
- The Indus and Ganges rivers: transportation
- Himalaya Mountains: protection, climate
- Monsoon rains: fed the rivers



VA #17 The Huang He River Valley



This is a map of the area that was controlled by the Shang Dynasty, along with a picture of the Huang He River cutting its way through the mountains.



VA #18 Natural Resources of the Huang He Valley 1

Ecosystem Goods:

- Huang He River: water for crops, animals, and humans; fish
- Fertile (“loess”) soil: agriculture, clay
- Pine trees: buildings, carvings used for decoration



Wood carving

VA #19 Natural Resources of the Huang He Valley 2

- Silk worms: silk fabrics
- Jade: jewelry
- Bronze: ritual vases and vessels
- Animals: sport (hunting), labor



Bronze mask



Silk worms



Jade mask

VA #20 Natural Resources of the Huang He Valley 3



The most important part of the Chinese economy was agriculture. People used water from the Huang He River. Farming was considered sacred. Some farmers burned crops to please the gods or communicate with them. The main crops were millet, wheat, barley, and later, rice.

Wheat farming

VA #21 Natural Resources and Rivers Chart

Natural Resource	Economy	Government	Religion	Culture
Silk (worms)	They sold and traded silk.	Leaders controlled trade.		Silk cloth was highly prized by the wealthy.

VA #22 Sacred Rivers

The Indus and Ganges rivers are mentioned in many sacred scriptures of Hinduism:



“Ganga [the river goddess] cast each of [her sons] into the Ganges at birth, so that they could quickly return to heaven.”

*Quote from
Mahabharata, Book 16*

“Sindhu [the Indus River] in might surpasses all the streams that flow. Varuna [a god] cut the channels for thy forward course, O Sindhu, when thou rankest on to win the race. Thou speedest o’er precipitous ridges of the earth, when thou art Lord and Leader of these moving floods.”

“Like floods of rain that fall in thunder from the cloud, so Sindhu rushes on bellowing like a bull.”

“Flashing and whitely-gleaming in her mightiness, she moves along her ample volumes through the realms. Most active of the active, Sindhu unrestrained, like to a dappled mare, beautiful, fair to see.”

“So have I praised its power, mighty and unrestrained, of independent glory, roaring as it runs.”

Quotes from the Rig Veda, Book 10

VA #23 Oracle Bones 1

VA #24 Oracle Bones 2

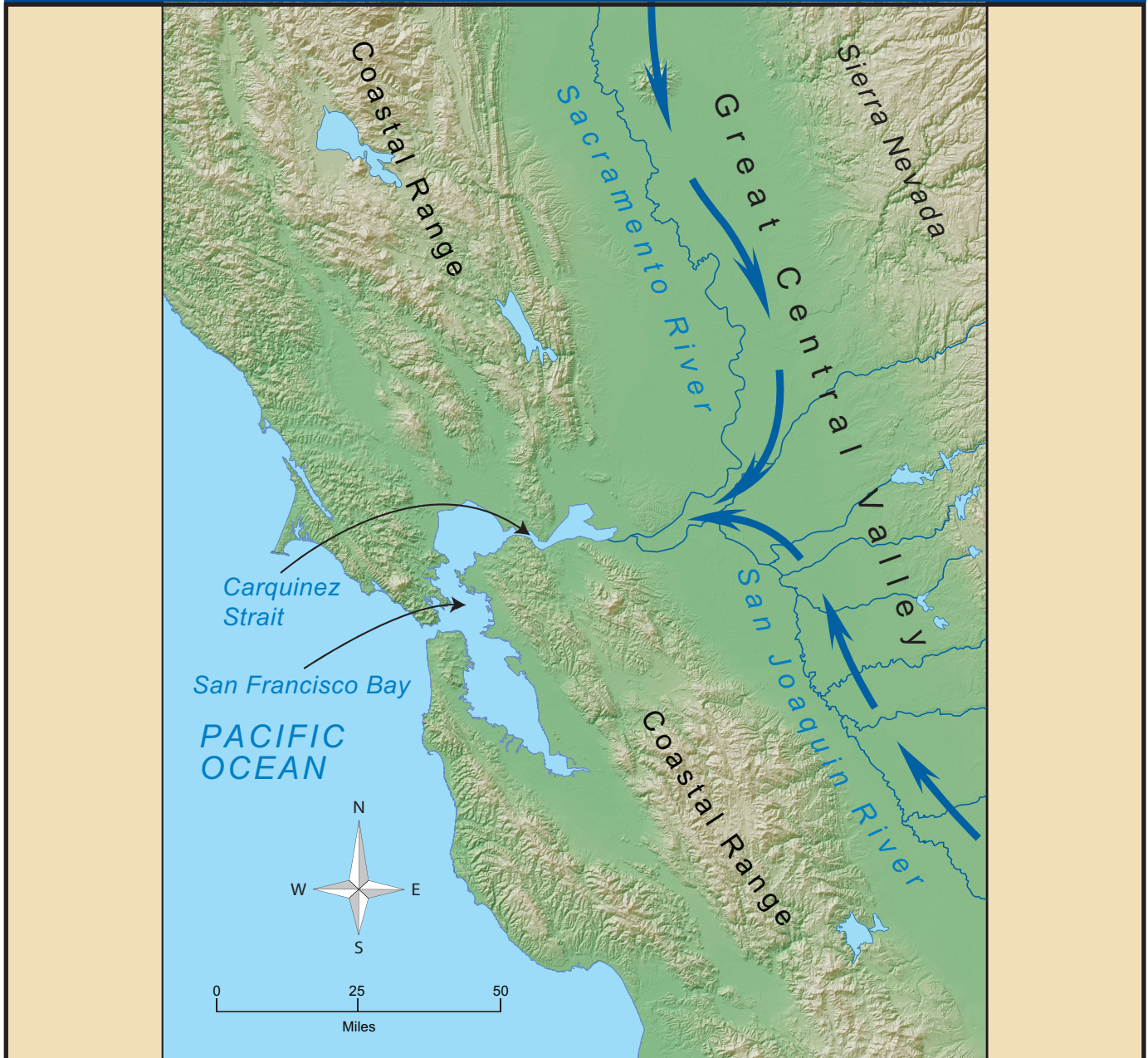
VA #25 Oracle Bones 3

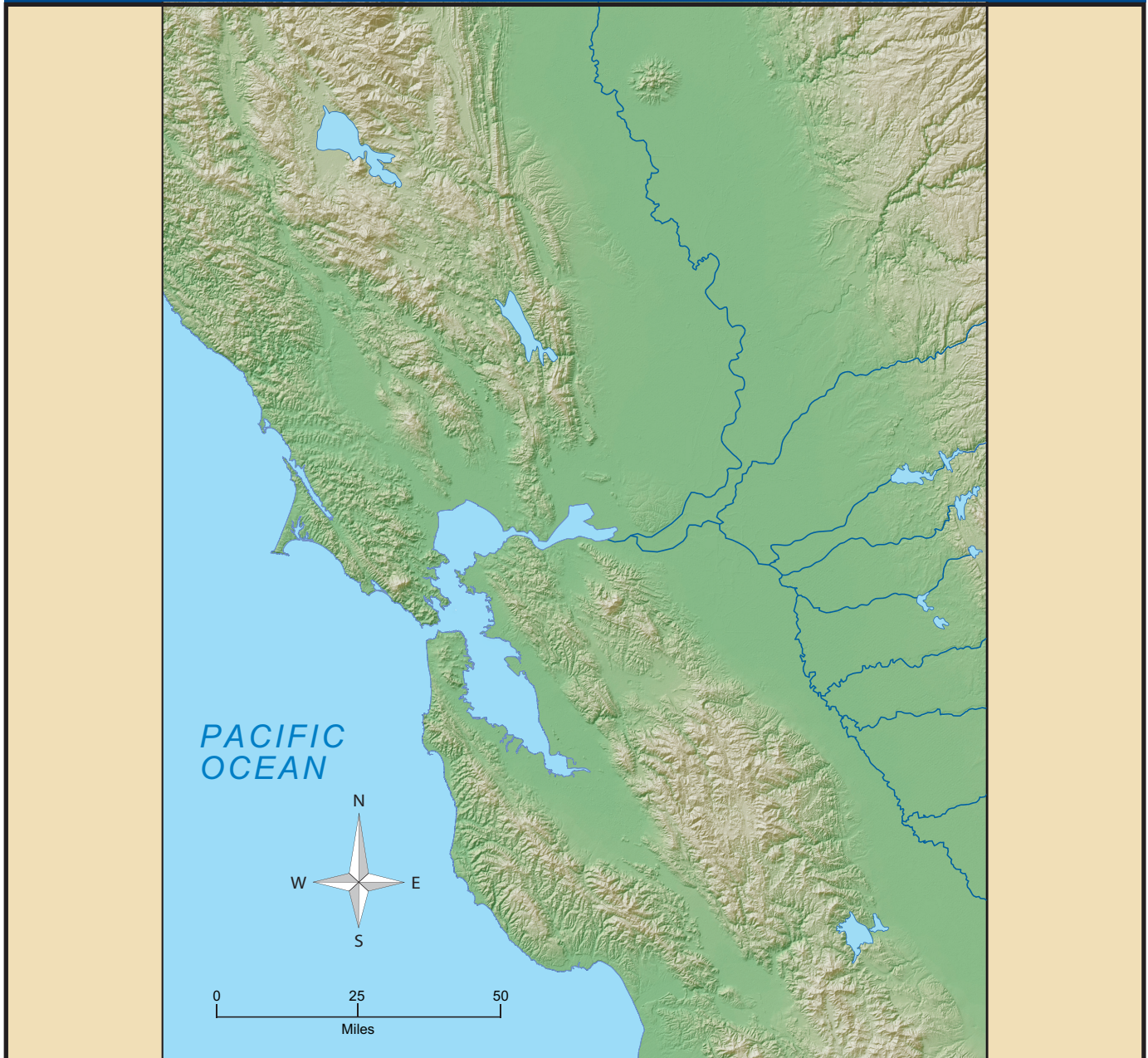


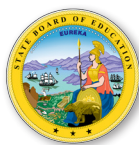
VA #26 The Empire During the Shang Dynasty



VA #27 The Sacramento-San Joaquin River Delta



VA #28 The Sacramento-San Joaquin River Delta



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